# Industrial<sup>IT</sup> Asset Master 5.0

Powered by 800xA System Version 5.0

# Installation







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Installation

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# Appendix A - Terminology

6 Identity Number

About This Book General

## **About This Book**

#### General

This manual includes information pertinent to installation and setup of prerequisite third party software, automated and manual installation of Asset Master, manual installation of Asset Master, installation of Device Library Wizard, and necessary post-installation setup of Asset Master. This manual does not include information on site planning, engineering planning, software configuration, network design, etc., which can be found in other manuals.

Asset Master and other functional area softwares describes in this book is at System Version 5.0. The installation procedures described in this manual require Windows Administrator privileges.



The security measures described in this document, such as user access, network security, firewalls, virus protection, etc., represent possible steps the user should consider based on a risk assessment for a particular application and installation. This risk assessment, as well as the proper implementation, configuration, installation, operation, administration, and maintenance of all relevant security related equipment, software, and procedures, are the responsibility of the user.

#### **Document Conventions**

The following conventions are used for the presentation of material:

- The words in names of screen elements (for example, the title in the title bar of a window, the label for a field of a dialog box) are initially capitalized.
- Capital letters are used for the name of a keyboard key if it is labeled on the keyboard. For example, press the ENTER key.
- Lowercase letters are used for the name of a keyboard key that is not labeled on the keyboard. For example, the **space bar, comma key**, and so on.
- Press CTRL+C indicates that you must hold down the CTRL key while pressing the C key (to copy a selected object in this case).

- Press **ESC E C** indicates that you press and release each key in sequence (to copy a selected object in this case).
- The names of push and toggle buttons are boldfaced. For example, click **OK**.
- The names of menus and menu items are boldfaced. For example, the File menu.
  - The following convention is used for menu operations: MenuName >
     MenuItem > CascadedMenuItem. For example: select File > New > Type.
  - The **Start** menu name always refers to the **Start** menu on the Windows Task Bar.
- System prompts/messages are shown in the Courier font, and user responses/input are in the boldfaced Courier font. For example, if you enter a value out of range, the following message is displayed:

Entered value is not valid. The value must be 0 to 30.

## Warning, Caution, Information, and Tip Icons

This publication includes **Warning**, **Caution**, and **Information** where appropriate to point out safety related or other important information. It also includes **Tip** to point out useful hints to the reader. The corresponding symbols should be interpreted as follows:



Electrical warning icon indicates the presence of a hazard which could result in *electrical shock*.



Warning icon indicates the presence of a hazard which could result in *personal injury*.



Caution icon indicates important information or warning related to the concept discussed in the text. It might indicate the presence of a hazard which could result in *corruption of software or damage to equipment/property*.



Information icon alerts the reader to pertinent facts and conditions.

About This Book Terminology



Tip icon indicates advice on, for example, how to design your project or how to use a certain function

Although **Warning** hazards are related to personal injury, and **Caution** hazards are associated with equipment or property damage, it should be understood that operation of damaged equipment could, under certain operational conditions, result in degraded process performance leading to personal injury or death. Therefore, **fully comply** with all **Warning** and **Caution** notices.

## **Terminology**

A list of terms associated with Asset Master is provided in Appendix A.

### **Related Documentation**

The following is a listing of documentation related to Asset Master.

Title	Description
Asset Master Version 5.0 Basic Configuration and Operation Manual	This manual provides details about basic configuration of Asset Master and basic operations that can be performed with Asset Master.
Asset Master Version 5.0 Detailed Configuration and Operation Manual	This document provides greater detail on all areas of usage of Asset Master. It is intended for advanced usage of Asset Master covering details such as SMP and CMMS setup.

Title	Description
Industrial Ethernet: A Pocket Guide	How to Plan, Install, and Maintain TCP/IP Ethernet Networks: The Basic Reference
Publisher: ISA - The Instrumentation, Systems, and Automation Society, May 2002 ISBN: 1556177887	Guide for Automation and Process Control Engineers.
Foundation Fieldbus: A Pocket Guide	Summary of background information, tips, tricks, and items to note when installing,
Publisher: ISA - The Instrumentation, Systems, and Automation Society, July 2002 ISBN: 1556177755	maintaining, or trouble-shooting.

#### **Additional Information Related to Documentation**

This book refers, at places, to 800xA System documentation and individual product documentation. Consider the following while referring to these documents in the context of Asset Master:

- Ignore all the sections and descriptions referring to 800xA specific configuration and operation. For example:
  - Configuration of AC800M controller and its I/O Modules
  - User Interfaces like Plant Explorer Workplace, Operator Workplace etc,.
  - All references to ControlBuilder M
- Relate 800xA user accounts to corresponding Asset Master user accounts. For example: "800xA Service User" corresponds to "Asset Master Service User".

# **Section 1 Pre-installation Setup**

#### Introduction

Asset Master is an application for managing, configuring and optimizing assets and their performance.

The key functional areas within Asset Master are:

- Device Management and Fieldbus
- Asset Optimization

The user has access to information from these areas via the Asset Master Workplace. Traditional engineering functions for device parameterization and configuration are available. In addition, Asset Master allows the user to have direct access to device documentation, standard operating procedures, drawings etc., depending on how the application has been configured.

The enabling technique for the above is the Aspect Object<sup>TM</sup> technology.

Prior to the installation of Asset Master, a set of pre-installation tasks need to be performed. A number of these may already be in place on the target computer, nevertheless it is important to verify that all of the following are correctly set-up prior to installing the Asset Master software.



All interactions with the PC while meeting Software Requirements must be done using the same local Administrators account. If you do not have a local Administrators account, contact your IT administrator. To determine if you have a local Administrators account, right click on My Computer, select Manage, open the Users folder under Local Users and Groups, right click on your log-in name, and select Properties. On the ensuing popup, select the Member Of tab. If you see Administrators, then you have a local administrators account.



Asset Master is best viewed with a screen resolution of 1280x1024 pixels.

## **Hardware Requirements**

For PCs used to run Asset Master, refer to *Third Party HW Products Verified for Industrial IT System 800xA (3BSE034719)* for a list of hardware.

#### **Hardware Accessories**

- IFAK PROFIBUS Adapter (is Pro USBx12)
- IFAK HART Modem (is HART USB)
- USB to RS232 9-pin convertor from Keyspan (Product Number: USA-19HS, Driver Version: 3.4)
- USB Hubs: Digi Hubport / 4c 10-28V DC powered USB 2.0 hub
- RS-232 to RS-485 Converters: Advantech (ADAM) 4520 Rev D2



For installation and configuration of the above mentioned products, please refer to the corresponding product manuals.

## **Software Requirements**

#### 1.0 Install Microsoft Windows XP with SP2 OR Windows 2003 Server SP1.

If you want to use Micorsoft Windows XP as the operating system platform, install Windows XP Professional with Service Pack 2 per instructions from Microsoft,

Alternately, you could also use Micorsoft Windows 2003 Server SP1 as the operating system platform.



Only use the Internet Explorer that is installed with Windows XP SP2 or Windows 2003 Server SP1.



The U.S. English version of the operating system is required.

#### 2.0 Microsoft Office 2003 Applications

Microsoft Excel and Microsoft Word are used in reporting and data import functions within Asset Master. Install Excel and Word from the Office 2003

suite of applications from Microsoft. Installation instructions for the these two can be found in the corresponding Microsoft Office 2003 installation manuals from Microsoft. You may install other applications from the Microsoft Office 2003 suite, as desired.

#### 3.0 Antivirus

Install an Anitvirus software prior to installing Asset Master. Regularly updated antivirus definitions from the corresponding antivirus vendor help in increased security.

#### 4.0 System Backup Software

It is recommended that you install system backup software, such as Norton Ghost from Symantec Corporation. This can be used in taking complete backup of your hard drive(s) with a functional Asset Master installation. A fucntional system can then be completely recovered through the backup taken. The state of the recovered system will be same as the state of the system at the time of taking the backup. Installation instructions for the backup software should be obtained from the software vendor.

#### 5.0 Computer Properties Set-up

Some of the Windows configurations, such as, Computer Name, Workgroup that this computer belongs to, Time Zone and Daylight Savings, and Regional Options, are automatically performed by the System Installer. Also, additional software and components required for a fucntional Asset Master will be automatically installed by the Asset Master System Installer.

#### 5.1 Virtual Memory Configuration

A correct configuration of virtual memory can enhance performance considerably. As a rule of thumb the size of **pagefile.sys** should be physical RAM x 2.5 or at least 1.5 GB. As another rule of thumb, if one more disk or partition exists, put the **pagefile.sys** there. After installation and starting up the nodes, use standard Windows procedures, via Windows Task Manager, to verify that the virtual memory being used is less than the configured value of the virtual memory.

#### 5.2 Miscellaneous Windows Settings

To prevent CPU intensive redrawing of the window, disable Show Window Contents while dragging in the Display Properties dialog.

#### 5.3 Disable Energy Saver and Screen Saver

It is recommended to NOT have any Energy Saving and screen saver functionality activated on Asset Master nodes (especially operator Workplace Clients), as this might lead to longer reaction times in case of an emergency. If the server or workstation BIOS has an Energy Saver configuration, configure it on a node-by-node basis. The Windows energy saving data is user dependent.

The energy saving setting may be accessed in two ways. The BIOS setup is available whenever the server or workstation is powered up. It may also be accessed via Power Options in Windows Control Panel. The screen saver may be turned off in the Display Properties option in Windows Control Panel.

#### 5.4 Disable Windows Firewall

The supported Windows Operating Systems come with a Windows Firewall component that must be disabled. Use standard Windows procedures to disable Windows Firewall on the Asset Master node.

#### 5.5 Disable Web Browser Popup Blocker

Some third party software may offer a web browser popup blocker. Do not use them with the thin client portions of the integrated applications (specifically Asset Optimization), since these applications open child window browsers to display application data for the user. If a popup blocker is being used on a web browser, disable it during use of these web based applications.

#### 5.6 Disable Virus Checking Software

If virus checking software is installed, disable it until after Asset Master is installed and configured (post installation).

#### **5.7 Disable Automatic Updates**



Ensure that all Windows Operating System Service Packs mentioned are installed in order to access this functionality.

1. If the selected Windows Operating System comes with an Automatic Updates component, it must be disabled. Select:

#### **Start > Control Panel > Automatic Updates**

2. Enable Turn off Automatic Updates and click OK.



Make sure that all the pre-requisite softwares mentioned above are properly installed, and the computer meets the minimum hardware requirements to take maximum advantage of Asset Master. Asset Master may not function effectively if the pre-requisites are not met.

# **Section 2 Installing Asset Master**

The automated installer for Asset Master does all the work of configuring Windows and installing the necessary software for Asset Master. This section describes in detail the installation steps for installing Asset Master.

Asset Master Installer is an application that automatically installs the necessary software and components for Asset Master and configures the Windows system.

When the Asset Master DVD is inserted into the drive, a screen similar to the one shown in Figure 1 is automatically launched. Alternately, the Asset Master System Installer is located in the folder 'System\_Installer' on the DVD. Double-click on setup.exe to start the installation of Asset Master System Installer.



The Asset Master System Installer does not, at this point, create the Asset Master Installer User account in Windows. Hence, login to Windows with a user having 'Administrator' rights.



Figure 1. Industrial<sup>IT</sup> Asset Master Splash Screen

Table 1. Button Descriptions

Button	Description
Installation Manual	Clicking on this button opens the Asset Master 5.0 Installation Manual.
Install Asset Master	Clicking on this button launches ABB Asset Master Installer Installation Wizard.
Release Notes	Clicking on this button opens the Asset Master Release Notes.
Exit	Clicking on this button closes closes the splash screen.



To open "Installation Manual" and "Release Notes", Adobe Acrobat Reader 7.0 must be installed. If the reader is not already installed, click on "Install Acrobat Reader 7.0" and follow the on screen instructions to install the reader.

When you begin the installation by clicking on **Install Asset Master**, a welcome screen similar to the one shown in Figure 2 will appear, listing "ABB Asset Master System Installer" as the software about to be installed. Let the checkbox next to it remain ticked. Click on the "**Install**" button.

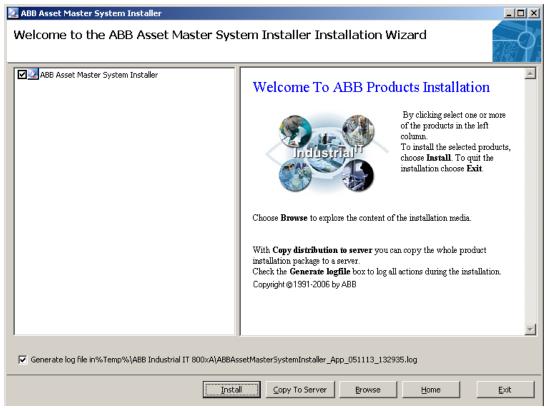


Figure 2. Welcome to ABB Asset Master Installer

The wizard installs all the necessary system installer components. If the dot net framework is not installed, a dialog similar to the one show in Figure 3 will pop up. Click **Yes** and follow the instructions on the screens to install the Dot Net framework.

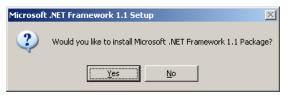


Figure 3. Install Dot Net Framework Dialog

Once these components are installed successfully, the installer application exits.

You can now start setting up a system, which is described in the next section Section 3, Setup of Asset Master

# **Section 3 Setup of Asset Master**

## **Starting the Asset Master Setup**



Please ensure that Asset Master DVD is inserted into the drive prior to starting the installation.

Through the Asset Master System Installer, you can now setup Asset Master. From the **Start** menu, select **Program > ABB Asset Master System Installer > Setup a New System**.

A welcome screen similar to the one shown in Figure 4 is displayed. Click on **Next** to continue.



Figure 4. Asset Master Installer Welcome Screen

Asset Master prepares for the installation, during which you'll see a screen similar to the one shown in Figure 5, indicating the progress. Once the preparation is complete, the **Next** button is enabled. Click on the **Next** button to continue.

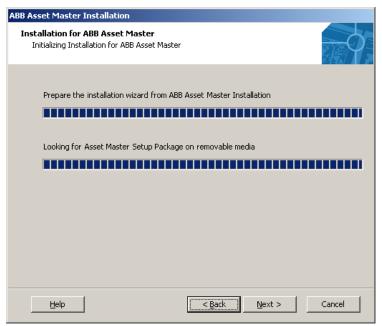


Figure 5. Initializing Asset Master Installation

In the resulting screen, similar to the one shown in Figure 6, provide the details as per the information shown in Table 2. System and Service Account Settings.

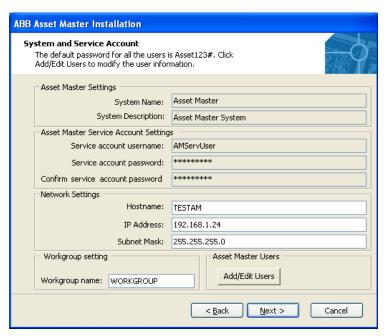


Figure 6. Asset Master Settings and Service Account Details

Table 2. System and Service Account Settings

Field	Description
Hostname	Sets the name of the machine for indentification in a network.
	Recommended Hostname is "AMSRV1".
IP Address	Sets the IP (Internet Protocol) Address (A unique number that identifies a device in a network) of the machine to the one specified in this field.
	The recommended IP address for the node is '192.168.1.24'.

Field	Description
Subnet Mask	Provide the subnet mask on which your network is located.
	The recommended subnet mask
Workgroup Name	The machine, on which Asset Master is installed, must be a part of a workgroup. Provide the name of your workgroup.  Recommended workgroup name is "AMGROUP".
Add/Edit	This takes you to another screen where in you can add users to existing user groups of Asset
	Master as show in Figure 7.

Table 2. System and Service Account Settings

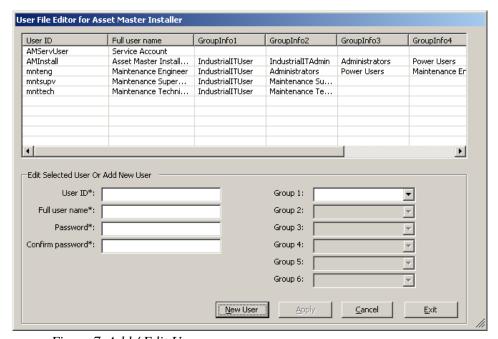


Figure 7. Add / Edit Users

#### **Edit Users**

To edit any user information double-click on the corresponding user row in the table displayed. This populates the user data in the corresponsing fields. Edit the information and click **Apply**. If any modification done needs to be cancelled while editing the information, press **Cancel**. The default Passwords for all users is "Asset123#".

#### Add Users

To add a new user, enter the information in the fields provided, as described in the Table 3. User Information, and click on **New User**.

Fields	Description
User ID	The id of the user.
Full User Name	Full name of the user for whom the id is created.
Password	Password corresponding to the user.
Confirm Password	Confirm the password provided in the password.
Group1 to Group 6	The user group that the user is affiliated.

*Table 3. User Information* 

Once all the correct information is entered, click **Exit** to return to the main installation screen. Click on **Next**.



Please ensure that any new user being added is part of "IndustrialIT user" user group.

If the new user is required to be a part of Asset Master Administrator, then the user should be a part of "IndustrialIT Admin" group.

If the new user is required to be a part of Windows Administrator, then user should be a part of "Administrators" group.

The next screen as shown in Figure 8 dislays the terms and conditions for the use of ABB Software. Read the terms and conditions carefully and check the box to accept the terms and conditions.

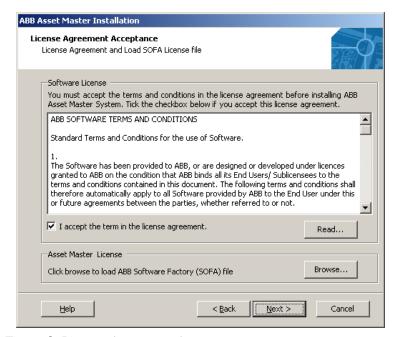


Figure 8. License Agreement Acceptance

Once you accept the terms and conditions of the license agreement, click on **Next** button.

In the resulting screen, similar to the one shown in Figure 9, confirm the start of the system installation by clicking on the **Finish** button.

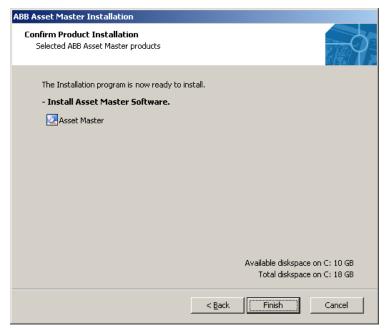


Figure 9. Confirm Product Installation

After clicking on the Finish button, Asset Master installation process is started as shown in Figure 10. During this process, the setup will automatically:

- configure Windows for Asset Master
- verify that required components are installed
- install Asset Master
- configure Asset Master
- and generate a system report.

The current action or progress of the installation is indicated when the corresponding action turns green.

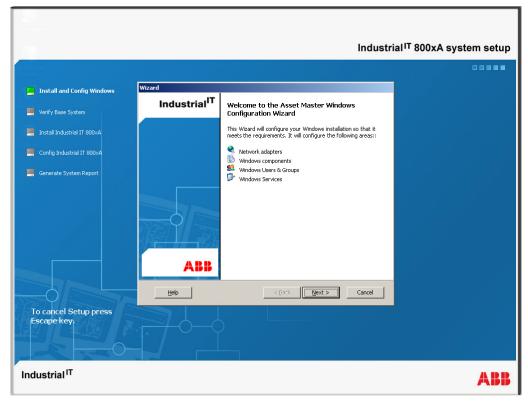


Figure 10. Asset Master Windows Configuration Wizard

#### **Configuring Windows for Asset Master**

The Asset Master installation process begins with the Asset Master Windows Configuration Wizard, as shown in Figure 10. The wizard will configure the following:

- Network Adaptors
- Windows Components
- Windows Users and User Groups
- Windows Services

Click on the **Next** button to continue with the Windows configuration.

The next screen displays the available network adaptors in your machine, in a screen similar to the one shown in Figure 11.

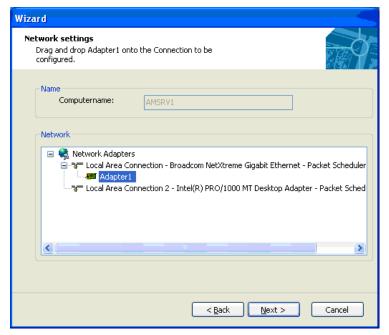


Figure 11. Asset Master Network Settings

Select the network adaptor from the list that you want to use with Asset Master. The adapter can be moved between 'Local Area Connecton's, by drag-and-drop. Here 'Local Area Connection – broadcom...' is selected. If you want to select the 'local

area connection 2' adapter, drag and drop the "Adapter1" to the required location.. Click on the **Next** button to continue.

A dialog similar to the one shown in Figure 12 pops up. Click **OK** to confirm or **Cancel** to go back to the selection screen.



Figure 12. Network Settings

Once the Windows configuration is complete, a screen similar to the one shown in Figure 13 is displayed.

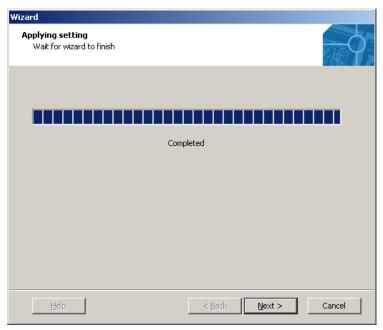


Figure 13. Apply Settings

Click on **Next** button to complete Windows configuration, and begin the Windows Components Configuration.

For some of the components to be installed, it is necessary to have the Windows Operating System installation disk. The installer will popup a dialog, similar to the one show in Figure 14, prompting for the Windows installation CD. Remove the DVD from the PC and insert the Windows installation CD and click **OK**.



Figure 14. Windows Installation CD Prompt

Once the windows components are installed, replace the Windows installation CD in the drive with the Asset Master DVD and continue the installing Asset Master.

A screen similar to the one shown in Figure 15 displays the progress, while the wizard gathers necessary details for configuring the Windows components. Click on the **Next** button to continue.



Figure 15. Components Configuration Progress

Confirm the start of the components configuration by clicking **Next** in a screen similar to the one shown in Figure 16.

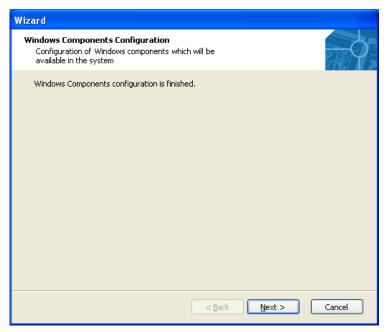


Figure 16. Configuring Windows Components

The next screen, as shown in Figure 17, displays the "user groups" that will be added to your system. Click on the **Next** button to continue.

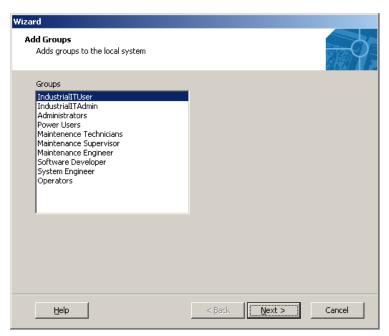


Figure 17. Adding Asset Master User Groups

The next screen, as shown in Figure 18, displays the "users" that will be added to your system. Click on the **Next** button to continue.

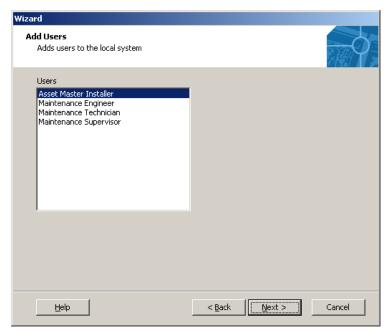


Figure 18. Adding Asset Master Users

The next screen, as shown in Figure, displays the Asset Master service user name. To continue with the installation without changing the Asset Master service user name or the corresponding password, click on **Next**.

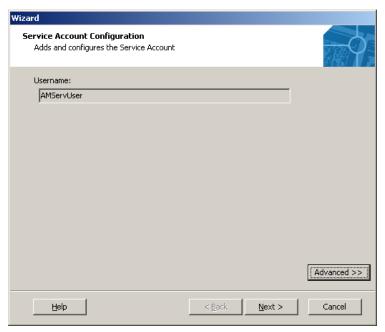


Figure 19. Service Account Configuration

To change the Asset Master service account user name and/or the corresponsing password click on the "Advanced >>" button.

In the resulting screen, as shown in the Figure 20, provide a new username for the Asset Master service account, with the corresponding passwords and click on **Next**.

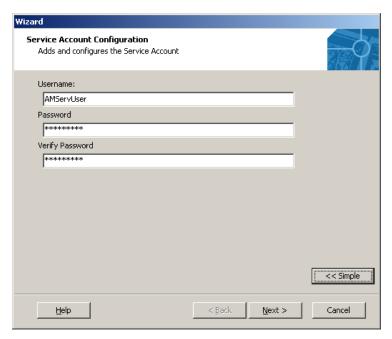


Figure 20. Change Service Account Configuration

Once the wizard completes the components configuration, a screen similar to one shown in Figure 21 is displayed, prompting for a machine restart.

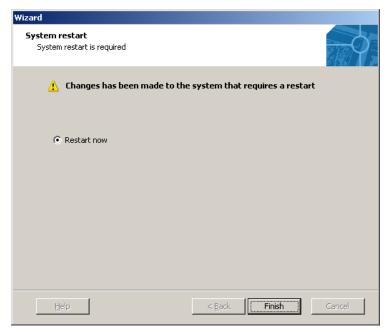


Figure 21. Asset Master System Restart

Click on the **Finish** button to restart the machine.

Follow the information in the popup dialog, as shown in Figure 22.



Figure 22. Asset Master System Setup Restart Information



Once the machine reboot is complete, login as "AMInstall" user. The default password for this user is "Asset123#".

## **Verifying the Base System**

The setup automatically continues by verifying that the required components are installed. The Asset Master Verifier Tool Wizard, similar to the one shown in Figure 23, is displayed. Click on the **Next** button to continue.



Installation of some components may require a machine restart. Restart the machine when prompted. Login as 'AMInstall' user. The dafault password for the user is 'Asset123#'



Figure 23. Asset Master System Verifier Tool Wizard

In the resulting screen (Figure 24), the verifier tool checks whether the current "AMInstall" has been granted "Administrator" rights on the system.

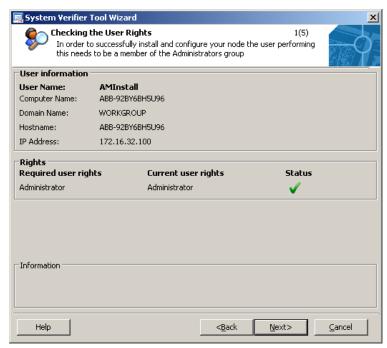


Figure 24. Check for Administrator Rights

A red cross mark indicates that the current user does not possess administrator rights, and hence cannot install the software on the system. In this case, exit from the current installation and logoff from the PC. Login to the system as "Administrator" and grant the necessary rights to the "AMInstall" user. Refer to the Windows documentation on how to grant rights or contact your System Administrator. Once the administrator rights are granted to the "AMInstall" user, then login to the system again as "AMInstall". To continue with the installation, from the **Start** menu go to **Programs > ABB Asset Master Installer > Continue Installation**. The installation will continue from the point where it had stopped.

A green tick mark indicates that the user has administrator rights and can proceed with the installation. Click on the **Next** button to continue.

In the next screen as shown in Figure 25, the Asset Master Verifier Tool Wizard checks for hardware compliance. A green tick indicates that a hardware requirement is met. An exclamation denotes that a hardware requirement does not meet the minimum requirement and that Asset Master will nevertheless work but with decreased performance. A red cross indicates that a hardware requirement is incompatible for the effective functioning of Asset Master.



Make sure, at least, that the minimum hardware requirement is met. This will ensure, at least, minimum performance of Asset Master.

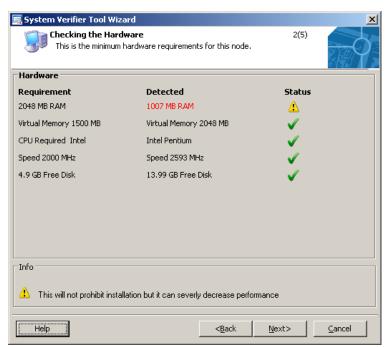


Figure 25. Check for Hardware Requirements

Click on **Next** button to continue.

In the resulting screen, similar to the one shown in Figure 26, the Asset Master Verifier Tool Wizard checks for installed Microsoft Software Components, that the Asset Master will use. If any of the listed software components are already installed,

the status of the software component is ticked green. If any of the software components is not installed, the status indicates a red cross against that component.

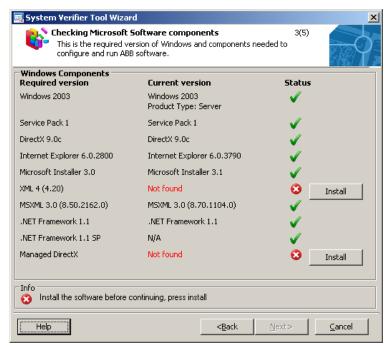
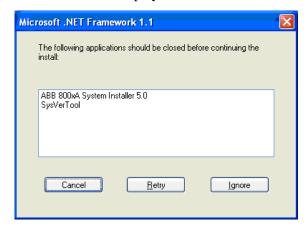


Figure 26. Check for Installed Microsoft Components

An **Install** button is displayed next to the status of the software component that is not installed, similar to what is shown in Figure 26. Click on the **Install** button to install the missing Windows component. Once the status of all the components is ticked green, the "Next" button is enabled. Click on the **Next** button to continue.



During the installation of some components (Eg. .NET Framework 1.1 SP) screen similar to the one below is displayed.



Click on **Ignore** to continue the installation.

In the resulting screen, similar to the one shown in Figure 27, the Asset Master Verifier Tool Wizard checks for additional software components installed, that Asset Master system will use. If any of the listed additional software component is already installed, the status of the software component is ticked green. If any of the software components is not installed, the status indicates a red cross against that component.

An **Install** button is displayed next to the status of the software component that is not installed, similar to what is shown in Figure 27.

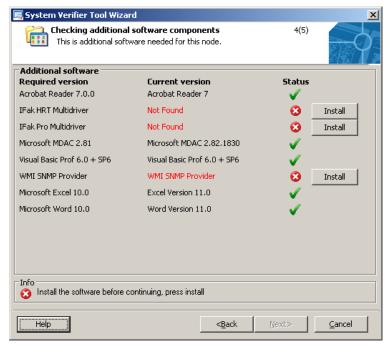


Figure 27. Check for Additional Components

Click on the **Install** button to install the missing software component and follow the installation instructions. Once the status of all the software components is ticked green, the "Next" button is enabled. Click on the **Next** button to continue.



During the installation of ifak PRO Multidriver, a screen similar to the one show below is displayed.



Check the USB check box and uncheck all other check boxes and click **Next** to continue.



If, during the process of installing the missing components, the Windows Operating System CD is to be inserted into the drive, then once the installation of the missing components are complete, replace the CD in the drive with Asset Master DVD. If a dialog similar to the one shown in Fig is displayed, then insert the Asset Master DVD into the drive and click **OK**.



In the next screen, similar to the one shown in Figure 28, the Asset Master Verifier Tool Wizard checks for installed hotfixes.

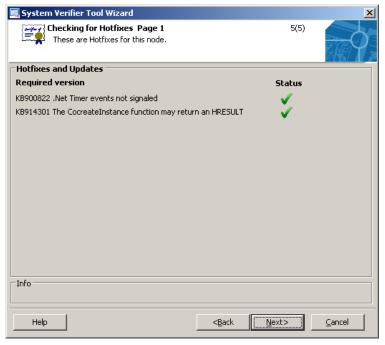


Figure 28. Check for Microsoft Hotfixes

If the listed hotfixes are already installed then the status of the corresponding hotfixes are ticked green. If any hotfix is not installed, the status of the corresponding hotfix is marked with a red cross and an Install button is displayed next to it. Click in the **Install** button to install the missing hotfix, and follow instructions on the screen. If you are prompted for a machine restart, restart the machine and continue with the system setup.

Once the status of all the listed hotfix is ticked green, the "Next" button is enabled. Click on **Next** button to continue.

A Security Warning dialog (Figure 29) is displayed prompting you to download and install any latest security related hotfixes, which Microsoft releases from time to time.



Figure 29. Microsoft Hotfixes Security Warning

If your Windows operating system is already updated with the latest security hotfixes, and you want to continue the installation click on the **No** button, and continue.

If any new security hotfixes from Microsoft are available, then click on the **Yes** button to exit from the system setup. Install the security hotfixes from Microsoft, and then continue with the system setup by selecting **Start > Programs > ABB Asset Master Installer > Continue Installation**.



It is recommended that Asset Master be updated with the latest security hotfixes all the time to ensure necessary levels of security. The recommended ABB certified hotfixes are available for download at <a href="http://solutionsbank.abb.com">http://solutionsbank.abb.com</a>.

Once the base system verification process is complete, a screen similar to the one shown in Figure 30 is displayed, with a report of the verification.

Click on **Save** to save the report in a text file.

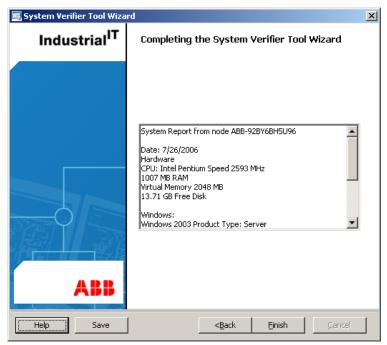


Figure 30. Asset Master System Report

Click on the **Finish** button to complete the Asset Master verification process.

## **Installing Asset Master**

The system setup is now ready to install the Asset Master software components. In a screen, similar to the one shown in Figure 31, all the ABB software components that will installed for Asset Master are displayed. All listed software are automatically installed once the installation begins.

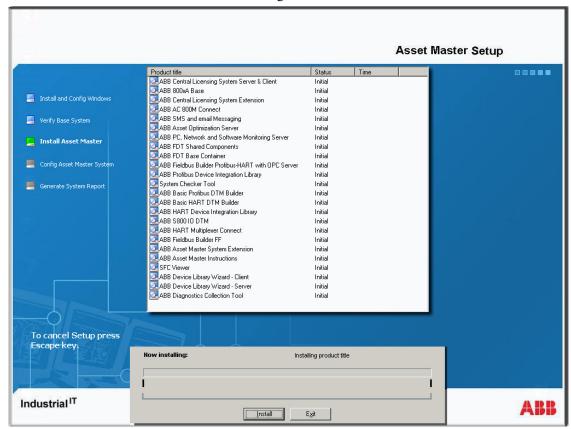


Figure 31. Install Asset Master

Click on the **Install** button to begin the installation of the ABB software components for Asset Master. During this time, you will see the software component being installed along with the installation progress of that component. After all the components are installed, the installer will prompt for a reboot of the machine. Click on the **OK** button to reboot the machine.

## Configuring Industrial IT 800xA

After Installing Asset Master, the installer will start configuring Asset Master. A screen similar to the one shown in Figure 32 would appear. Click on **Next** to continue.

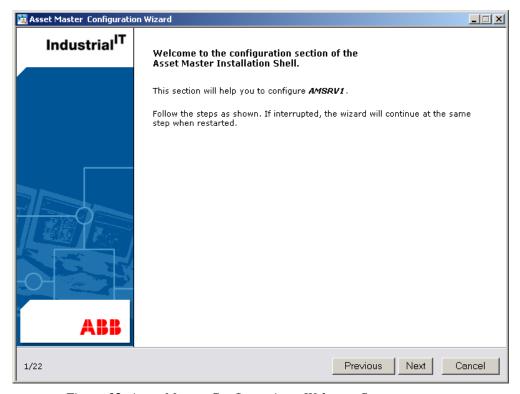


Figure 32. Asset Master Configuration - Welcome Screen

In the resulting screen (Figure 33), the installer encourages you to take a backup of the system, using a disk imaging software such as Norton Ghost from Symantec Corporation.



Figure 33. Create System Backup

In the unlikely event of a system crash, this backup can be used to restore your system to the state at which the backup was taken, saving significant time bu not having to install Asset Master up to this stage.

To take a backup, exit the current installation by clicking on the **Cancel** button. Press "**Esc**" and click on **Yes** button in the popup dialog to exit the current installation. Take a backup of the Asset Master hard disk. After the backup is complete, continue the installation through the **Start > Programs > ABB Asset Master Installer > Continue Installation**.

Once the installer starts, move on to the next screen by click on **Next**. A screen similar to the one shown in Figure 34 displays an important note on Microsoft ActiveX Controls. Read the information carefully, click on **Next** button.

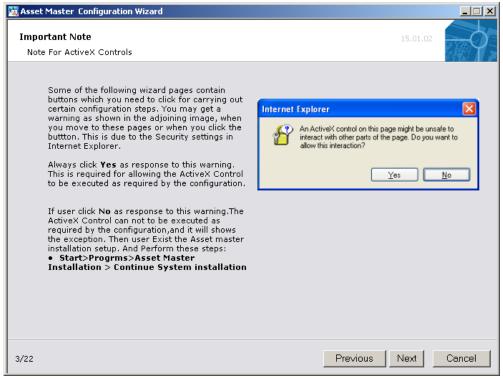


Figure 34. An Important Note on Microsoft ActiveX Controls

In the resulting screen, similar to the one shown in Figure 35, provide the Asset Master license.

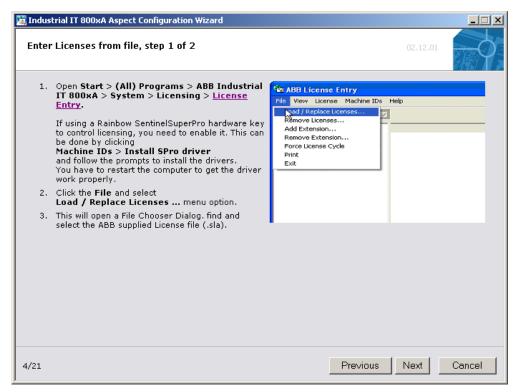


Figure 35. Enter Asset Master License

Click on the link **License Entry**. Depending on the security settings of the Internet Explorer, a popup might appear displaying information about an ActiveX control trying to open, such as the one shown in Figure 36.

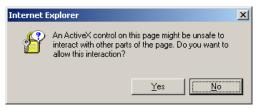


Figure 36. ActiveX Control Notification of Internet Explorer

Click on **Yes** to continue opening the ABB Lincese Tool. When the License Entry tool opens, click **Next** in the Asset Master Configuration Wizard to read further instructions on entering the license file, which displays a screen similar to the one shown in Figure 37.

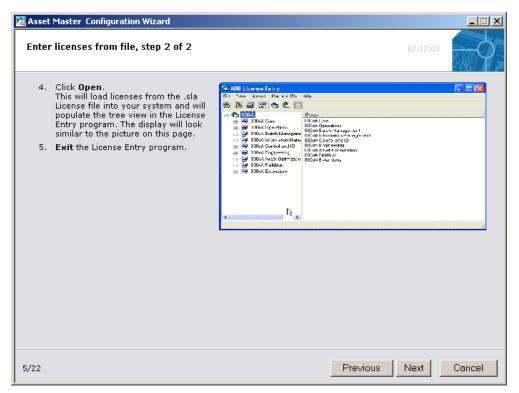


Figure 37. Enter Asset Master License

Follow the steps mentioned in the screens, as shown in Figure 35 and Figure 37, or read the following instructions to load the license file.

- 1. Open Start > (All) Programs > ABB Industrial IT 800xA > System > Licensing > License Entry.
- 2. From the **File** menu, of the License Entry tool, select **Load / Replace Licenses...**.
- 3. This opens a file chooser dialog. Browse and select the corresponding license file (.*sla* file) for Asset Master.
- 4. Click on **Open** button. This will load the licenses from the *.sla* license file into your system and populate the tree view in the License Entry tool.
- 5. Exit the License Entry program.
- i

If you do not have the license file, and you want the advantage of Asset Master, please get in touch with ABB Customer Support for your region to obtain it.

Click on the **Next** button to advance to the next screen.

🐹 Asset Master Configuration Wizard Enter License Server node name 1. Open Start > (All) Programs > ABB Industrial IT 800xA > System > Licensing > License Status Viewer. 2. Verify that the Connection Status is No Error in the License Status Viewer. The connection status is displayed at the bottom of the License Status Viewer as shown in the adjoining figure. 3. Exit the License Status Viewer program. CLS Machine: WOTAN Connection Status: No Error 6/22 Previous Next Cancel

In the resulting screen, as shown in Figure 38, perform the steps listed below.

Figure 38. Enter License Server Node Name

- 1. Open Start > (All) Programs > ABB Industrial IT 800xA > System > Licensing > License Status Viewer.
- 2. Verify that the *Connection Status*, which is displayed at the bottom of the screen as shown, is marked **No Error**.
- 3. **Exit** the License Status Viewer program.

Click on the **Next** button to move to "System Software User Settings" screen (Figure 39).

In this screen you configure Windows Users and User Groups that are to be used by Asset Master.

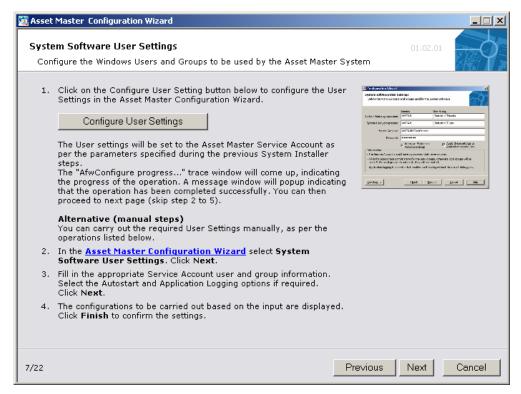


Figure 39. System Software User Settings

Click on **Configure User Settings** button. Depending on the security settings of the Internet Explorer, a popup might appear displaying information about an ActiveX control trying to open.

Click on the **Yes** button to continue configuring the user settings for Asset Master. The User settings will be set to '**AMServUser**', an Asset Master Service Account, as per the parameters specified during earlier System Installation steps.

A progress window appears indicating the progress of the operation. A message will popup indicating successful completion of the task. You can then click on the **Next** button to move on to the next screen (Figure 40).

In the event that the ActiveX control does not open, follow the instructions steps mentioned below.

- 1. In the Asset Master Configuration Wizard, select System Software User Settings and click on Next.
- 2. Fill in the appropriate Service Account user and group information. Select the Autostart and Application Logging options if required and then click on **Next** button.
- 3. A list of the configurations to be carried are displayed. Click on the **Finish** button to confirm the settings.
- 4. In the Aspect Configuration Wizard click on the Next button and follow the instructions on that page.

Once the User settings are complete, click on **Next** to set the Network Access Security option.



If the operating system of the machine is **Windows XP**, continue with this step. If your operating system is not Windows XP, but Windows 2003, then skip this step and click on the **Next** button to configure daylight savings and power settings for your laptop.

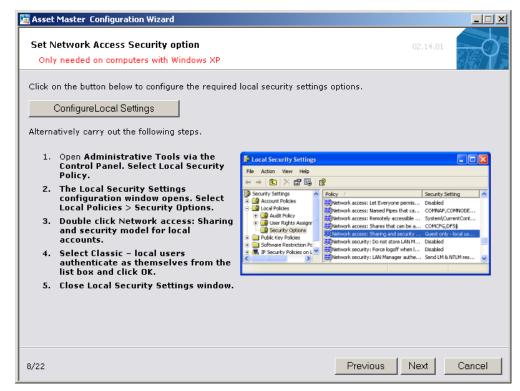


Figure 40. Configure Network Access Security Option

Click on **Configure Local Settings** button. Depending on the security settings of the Internet Explorer, a popup might appear displaying information about an ActiveX control trying to open.

Click on the **Yes** button to continue and automatically configure the local settings for Asset Master.

In the event that the ActiveX control does not open, follow the instructions steps mentioned below.

- Open "Administrative Tools" from Start menu, Settings > Control Panel >
   Administrative Tools and open Local Security Policy.
- 2. Once the Local Security Settings configuration window opens, select **Local Policies > Security Options**.
- 3. Double-click on **Network access: Sharing and security model for local accounts**.
- 4. Select **Classic local users authenticate as themselves** from the list box and click on **OK**.
- 5. Close the **Local Security Settings** window.

Once the Network Access Security options is configured, click on the **Next** button to configure daylight savings and power settings.

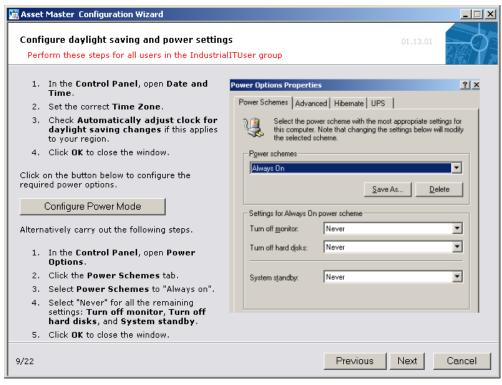


Figure 41. Configure Daylight Savings and Power Settings

To set the daylight savings option on your machine, follow these steps:

- From the Start menu select Settings > Control Panel and open Date and Time.
- 2. Set the appropriate **Time Zone** to match your region.
- 3. Check the box **Automatically adjust clock for daylight changes** if this applies to your region.
- 4. Click on the **OK** button to close the window.

Click on **Configure Power Mode** button similar to the one shown in Figure 41. Depending on the security settings of the Internet Explorer, a popup might appear displaying information about an ActiveX control trying to open.

Click on the Yes button to continue and configure the power mode for you laptop.

In the event that the ActiveX control does not open, follow the instructions steps mentioned below to configure the power mode for your laptop.

- 1. From the **Start** menu select **Settings** > **Control Panel** and open **Power Options**.
- 2. Select the **Power Schemes** tab.
- 3. Select the "Power schemes" to **Always On**.
- 4. Select **Never** for the remaining options: **Turn off monitor**, **Turn off hard disks** and **System standby**.
- 5. Click on the **OK** button to close the window.

Once the daylight savings and power options are set, click on the **Next** button to set the regional options.



Perform these steps for all users in the 'IndustrialITUser' Group.

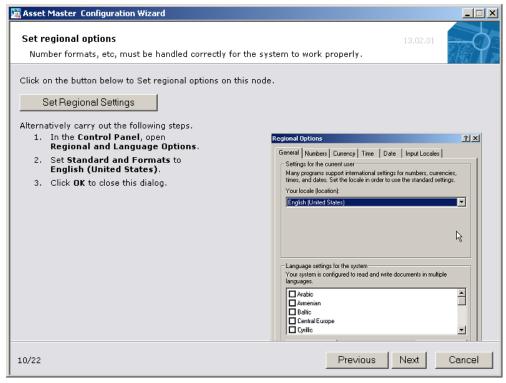


Figure 42. Configure Regional Options

Click on **Set Regional Settings** button as shown in Figure 42. Depending on the security settings of Internet Explorer, a popup might appear displaying information about an ActiveX control trying to open.

Click on the **Yes** button to continue setting regional settings and follow steps 2 and 3 mentioned below.

In the event that the ActiveX control does not open, follow the instructions steps 1 through 3 mentioned below to set the regional settings.

- 1. From the **Start** menu select **Settings** > **Control Panel** and open **Regional and Language Options**.
- 2. In the **Regional Options** tab, set the "Standars and formats" to **English** (United States).
- 3. Click on the **OK** button to close the window.

Once the regional options are set, click on the **Next** button to disable Windows Time service.

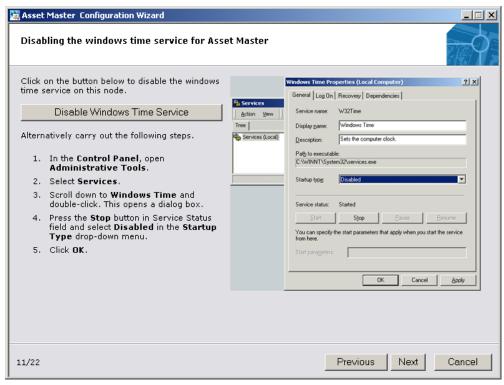


Figure 43. Disable Windows Time Service

Click on **Disable Windows Time Service** button as shown in Figure 43. Depending on the security settings of the Internet Explorer, a popup might appear displaying information about an ActiveX control trying to open.

Click on the **Yes** button to continue and automatically disable the Windows Time service.

In the event that the ActiveX control does not open, follow the instructions steps mentioned below.

- 1. From the **Start** menu select **Settings > Control Panel > Administrative Tools** and open **Services**.
- 2. From the list of service, double-click on the service named **Windows Time**.
- 3. In the resulting window, click on the **Stop** button to stop the service if it is running. Select **Disabled** from the **Startup type** drop down list.
- 4. Click on the **OK** button to close the window.

Once the Windows Time service is disabled click in the **Next** button.

The resulting screen similar to the once shown in Figure 44 provides instructions to configure FOUNDATION Fieldbus.

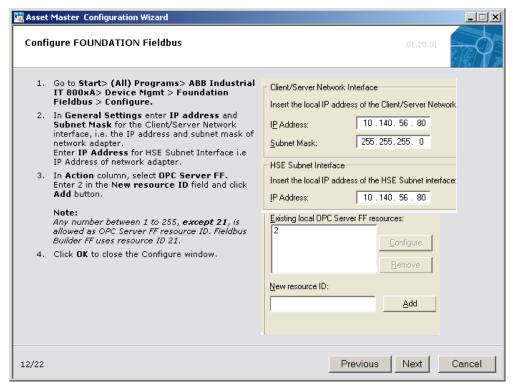


Figure 44. Configure FOUNDATION Fieldbus

Follow these steps to manually configure FOUNDATION Fieldbus:

From the Start menu select (All) Programs > ABB Industrial IT 800xA >
 Device Mgmt - FF > FOUNDATION Fieldbus > Configure. This opens the
 "Configure" program for FOUNDATION Fieldbus Device Integration. From
 the list in the Actions column, select OPC Server FF.

2. Enter a number in the **New Resource ID** text box.



The resource Id for the *OPC Server FF* can range from 1 to 255, but *Filedbus Builder FF* has the fixed resource Id **21** for *Fieldbus Builder FF*. This Id cannot be changed, and hence **21** as resource Id is not recommended as a new resource Id.

The recommended resource ID is 2.

3. Click on the **OK** button to commit the configuration.

Once the FOUNDATION Fieldbus is configured, click on the **Next** button to see instructions on restoring Asset Master.



Figure 45. Restore Asset Master



The process of restoring the system might take a few minutes to a few hours depending on the PC hardware capabilities.

Follow these steps to restore the Asset Master system:

- 1. From the **Start** menu select (**All**) **Programs > ABB Industrial IT 800xA > System > Configuration Wizard**.
- 2. From the listed actions in the Configuration Wizard, select **Restore System** and click on the **Next** button.
- 3. Click on the **Select Path** button. In the "Select Path" dialog click on **Add** button to locate Asset Master System Backup. Browse to the folder '\Asset

Master\Asset Master System Backup' on the Asset Master DVD, and click on the **OK** button.

- 4. In the "Select Path" dialog a default path is displayed. Select this path and then click on the **OK** button to close the dialog.
- 5. In the Configuration Wizard, the backup location with the date of the backup is displayed. Select the listed backup and click on the **Next** button.
- 6. In the subsequent screens of the Configuration Wizard, use the default values and click on the **Next** button.
- 7. In the resulting screen, verify the summary of the selections made for the system restore. When the summary report is in order, click on the **Finish** button to start the system restore process.

Once the system is restored completely, you might be prompted for a machine restart. Restart the machine and check the following indicators to verify whether the system is running:

1. Hover the cursor over the System Status icon in the Windows Notification area, near the lower right corner of the screen. The popup message should indicate that the system is **Enabled**.

2. Wait until the system is running and the icon turns green. It might take a few minutes, depending on your machine, for the system to be created and started.



Figure 46. Verify Whether System is Running

Once the system restore is complete and verified, click on the **Next** to button to advance to Alarm Logger Configuration.

A screen, similar to the one shown in Figure 47 is displayed, wherein instructions are provided for configuring Alarm Logger.

Perform the below mentioned steps prior to continuing with the Alarm Logger Configuration:

Open Asset Master workplace:
 From the Start menu, select ABB Industrial IT 800xA > System >

#### Workplace

- OR -

Double-click on "My ePlant" icon on the desktop.

- 2. From the Service Structure, select **Services -> Alarm Logger Service -> Basic, Service Group**.
- 3. Select "Service Group Definition" aspect.
- 4. Open the "Special Configuration" tab.
- 5. From the "Logger Configuration Name" drop-down box, select "Common Alarm & Event Logger Configuration" and click **Apply**.

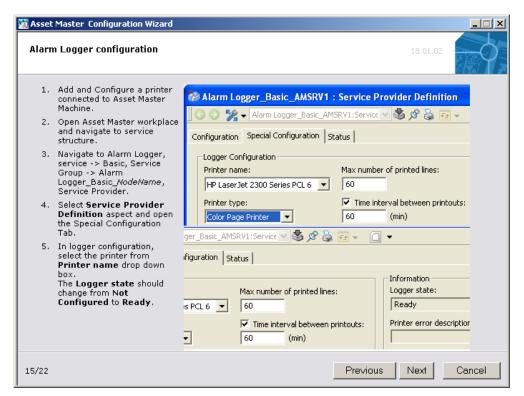


Figure 47. Configure Alarm Logger

Follow these steps to configure Alarm Logger:

- 1. Add and configure a printer that is connected to the machine where Asset Master is installed.
- Open Asset Master workplace: From the Start menu, select ABB Industrial IT 800xA > System > Workplace

- OR -

Double-click on "My ePlant" icon on the desktop

- 3. From the Service Structure, expand Services and navigate through Alarm Logger, Service --> Basic, Service Group --> Alarm Logger\_Basic\_AMSRV1, Service Provide. Open Service Provider Definition aspect and select Special Configuration tab.
- 4. In the logger configuration, from the *Printer Name* drop down box which lists printers configured on the machine, select a printer. You should now see the *Logger State* change from **Not Configured** to **Ready**.

Once the Alarm Logger configuration is complete, click on **Next** button in Asset Master Configuration Wizard.

A screen, similar to the one shown in Figure 48 is displayed, wherein instructions are provided for verifying whether all Asset Master related servers are running.

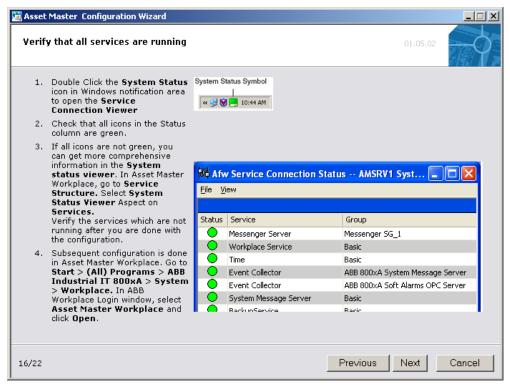


Figure 48. Verify Services that are Running

Follow these steps to verify whether all the servers are running.

- 1. Open the **Service Connection Viewer** by double-clicking on the **System Status** icon in the Windows notification area.
- Check whether the status of all the listed services are green. If the status of any service is not green, then more information is available in the System Status Viewer.
- 3. Opening the Asset Master is described in the next step. In the **Asset Master**, open **Service Structure**, select **Services** and open **System Status Viewer** aspect. Make a note of any service which is not running, and verify them when you are through with the configuration.

 Subsequent configurations are performed within Asset Master. Open Plant Explorer from the Start menu and select (All) Programs > ABB Industrial IT 800xA > System > Workplace. Select Asset Master Workplace and click Open.

Once it is ensured that all the services are running, with their corresponding status green in the Service Connection Viewer, and the Asset Master is open, click on the **Next** button to see how to see how to configure Asset Optimization settings.

A screen similar to the one shown in Figure 49 is displayed describing steps to configure Asset Optimization.

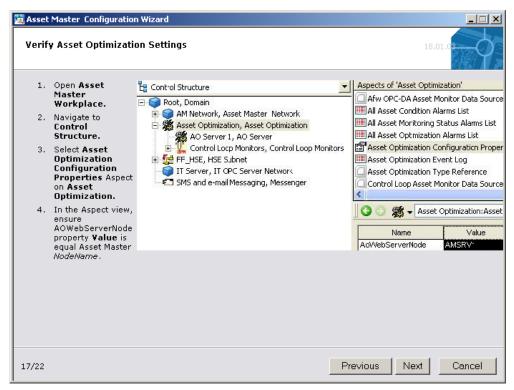


Figure 49. Verify Asset Optimization Settings

Follow these steps to configure Asset Optimization settings:

- 1. Open **Asset Master Workplace** and navigate to **Control Structure**.
- 2. Open **Asset Optimization, Asset Optimization Aspect** object and Select **Asset Optimization Configuration Properties** aspect.
- 3. In the aspect view, ensure *AOWebServerNode* property value is the same as Asset Master *NodeName*.

Once the Asset Optimization configuration is complete, click on **Next** button in Asset Master Configuration Wizard.

A screen similar to the one shown in Figure 50 is displayed with steps to associate user groups. Refer to Table 4. User Groups Mapping to see the user group mapping between Windows and Asset Master.

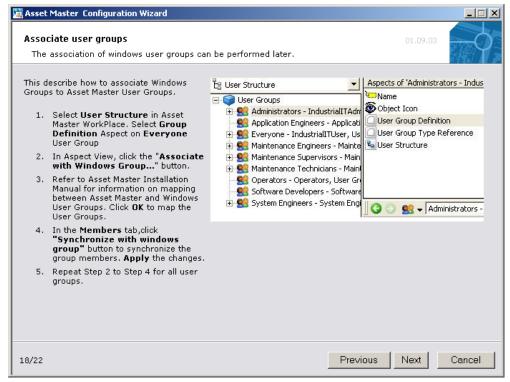


Figure 50. Associate User Groups

Table 4. User Groups Mapping

Asset Master User Group	Windows User Group
Everyone	Industrial IT User
Administrators	Industrial IT Admin
Application Engineers	Application Engineers
System Developers	System Developers

Asset Master User Group	Windows User Group
System Engineers	System Engineers
Operators	Operators
Maintenance Technicians	Maintenance Technicians
Maintenance Supervisors	Maintenance Supervisors
Maintenance Engineers	Maintenance Engineers

Table 4. User Groups Mapping



The following steps are optional and they describe how Windows Groups can be associated with the User Groups in the Asset Master System.

The following steps describe how to associate Windows User Groups with the User Groups of Asset Master:

- 1. In the Asset Master Workplace, select the **User Groups** object from the **User Structure** list.
- Select a user group object from the list of objects under User Groups. Begin the
  associations from the Everyone user group and open its User Group
  Definition aspect and click on the 'Associate with Windows Group...' button.
- 3. In the dialog window that opens, select the corresponding Windows group and click on **OK** and then click on **Apply**.
- 4. Users can be added from the **Members** tab by clicking on the '**Synchronize** with Windows Group...' button.
- 5. Repeat steps 2 through 4 for all user group objects that have a corresponding Windows user group.

Once user group association is complete, click on the **Next** button to see how to configure time service.

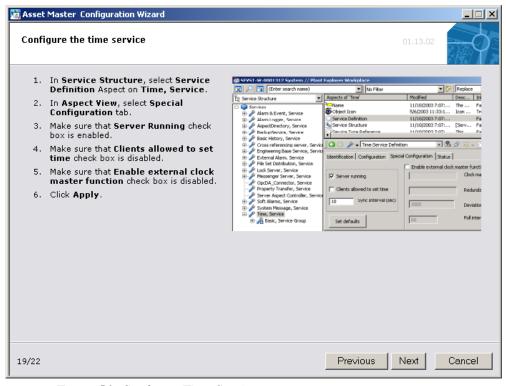


Figure 51. Configure Time Service

The following steps describe how to configure the time service in Asset Master.

- 1. In the Asset Master, select **Service Structure**.
- 2. Expand **Services** and select **Time**, **Service**. In the Aspect view select **Service Definition**.
- 3. Select the **Special Configuration** tab
  - a. Make sure that the check-box for **Server Running** is checked.
  - b. Make sure that the check-box for **Clients allowed to set time** is unchecked.
  - Make sure that the check-box for Enable external clock master function is unchecked.

4. Click on the **Apply** button to save the changes.

Once the time service is configured in Asset Master, click on the **Next** button to see how to configure DCOM for HART multiplexer Connect on a client node.

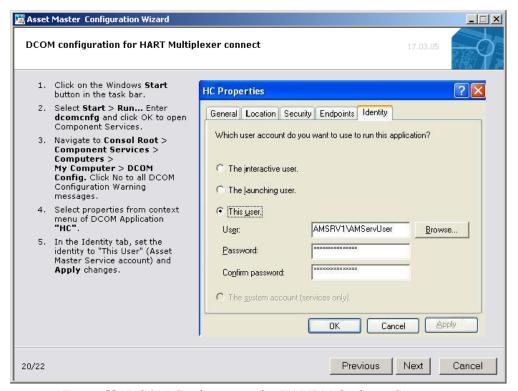


Figure 52. DCOM Configuration for HART Multiplexer Connect

Table 5. DCOM Settings describes the correct DCOM (and COM+) settings for installed components based on node types.

**Installed Components Settings** Type DCOM Identity: This User (Asset DeviceManagementServer Master Service Account) ABB Fieldbus OPC-Server DA HC The following changes must be adapted in Properties View > Location tab to: HART Server node: Run application on this computer. Other nodes: Run Application on the following computer. Insert the IP address of the system node where the HART Server is running. COM+ **DMSComPlus** 

Table 5. DCOM Settings

The following steps describe DCOM configurations for a HART Miltiplexer Connect:

- 1. From the **Start** menu, select **Run** and enter *dcomcnfg* and click on the button **OK**.
- 2. From the Console Root select Component Services > Computers > My Computer > DCOM Config.
- 3. Right-click on the **HC** component and select **Properties**.
- 4. Select the tab named **Identity**, in the Properties window, and set the indentity to **This User (Asset Master service account)**.
- 5. Confirm the changes by clicking on **OK** button and close the window.

Once you have made above mentioned DCOM configuration, click on the **Next** button. This will result in a screen similar to the one shown in Figure 53.

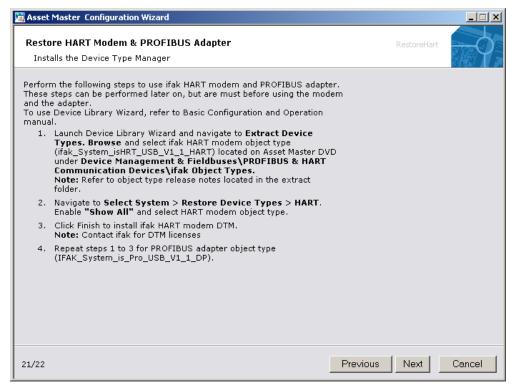


Figure 53. Restore HART Modem and Profibus Adapter Objects

Perform the following steps to use ifak HART modem and PROFIBUS adapter. These steps can be performed later on, but are must before using the modem and the adapter.

To use Device Library Wizard, refer to Basic Configuration and Operation manual.

Launch Device Library Wizard and navigate to Extract Device Types. Browse
and select ifak HART modem object type
 (ifak\_System\_isHRT\_USB\_V1\_1\_HART) located on Asset Master DVD under

Device Management & Fieldbuses\PROFIBUS & HART Communication Devices\ifak Object Types.



Refer to object type release notes located in the extract folder.

- Navigate to Select System > Restore Device Types > HART. Enable Show All and select HART modem object type.
- 3. Click **Finish** to install ifak HART modem DTM.

Contact ifak for DTM licenses

4. Repeat steps 1 to 3 to install PROFIBUS adapter object type (IFAK\_System\_is\_Pro\_USB\_V1\_1\_DP).

Click on the **Next** button to advance to the next screen.

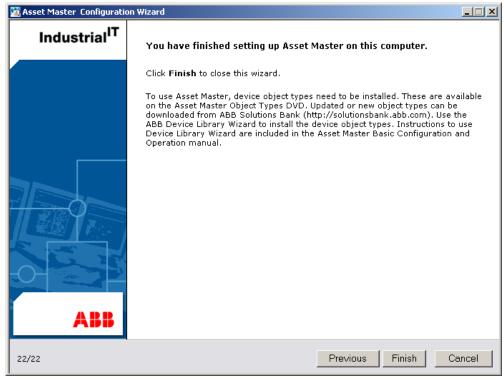


Figure 54. Asset Master System Setup Complete

Click on the Finish button to complete the configuration of Asset Master.

A popup is displayed with a message prompting to close the window. Figure 55. Window Close Warning - Internet Explorer [CloseWindow]



Click on the **Yes** button to continue.

# **Generating System Report**

Asset Master System Report Wizard will start with a screen similar to the one shown in Figure 56.

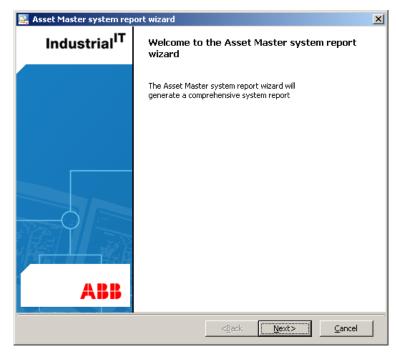


Figure 56. System Report Wizard - Welcome Screen

Click on the **Next** button, which pops up a screen similar to the one shown in Figure 57.



Figure 57. Folder Browser for placing Asset Master Setup Report

Select the folder where you want the report to be placed and click in the **OK** button. In the system report wizard, similar to the screen in Figure 58, click on the **Next** button to generate the report.

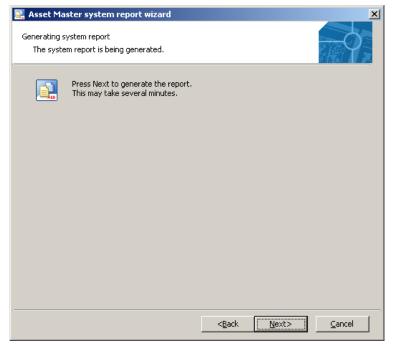


Figure 58. Asset Master System Report Wizard

Once the report generation is complete, a screen similar to the one shown in Figure 59 is presented.

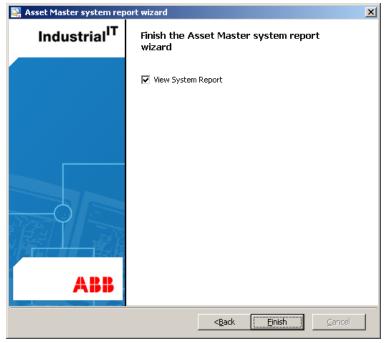


Figure 59. View System Report

To view the system report, check the box against **View System Report** and click on the **Finish** button. The generated report is displayed which you can save for future reference. A message similar to the one shown below pops up indicating successful installation and configuration of Asset Master.



Figure 60. Asset Master Installation & Configuration Completion Dialog Congratulations! Your Asset Master node is successfully installed and configured.

You now need to install the DTMs of IFAK HART and IFAK PROFIBUS modems. See Section 4, Post Installation for instructions.

# **Section 4 Post Installation**

### **IFAK DTM Installation**

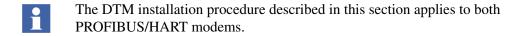
To install the Device Type Managers (DTMs) for IFAK HART modem and IFAK PROFIBUS modem, you first need to extract the device object types and the restore them through Device Library Wizard.



The prodecure for installing the DTMs is similar for both HART and PROFIBUS modems.

The following sections describes the DTM installation procedure:

- Extract Device Object Types on page 94
- Restore Device Object Types on page 98



### **Extract Device Object Types**

The following steps describe how to extract device object types of IFAK HART/PROFIBUS modems.

From the Start menu, select (All) Programs > ABB Industrial IT 800xA > Device Mgmt > ABB Device Library Wizard. The Device Library Wizard screen, similar to the one shown in Figure 61 opens.

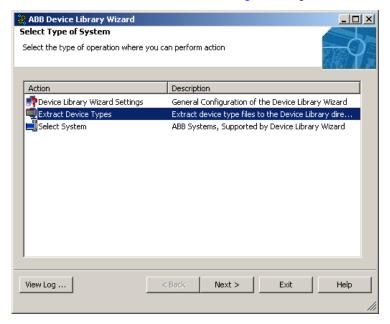


Figure 61. Select Extract Device Types

Select Extract Device Types and click on Next button.

 In the resulting screen, similar to the one shown in Figure 62, Click on the Browse button.

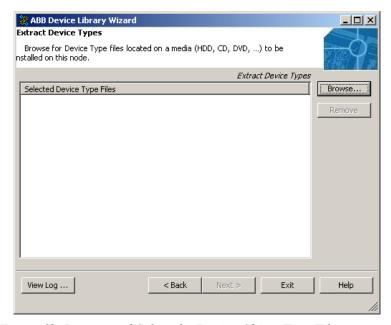


Figure 62. Browse and Select the Device Object Type File

On the Asset Master DVD, locate the folder **Device Management & Fieldbuses > PROFIBUS & HART Communication Devices > ifak Object Types** and execute:

2PAA101492\_B\_en\_DeviceObjectType\_ifak\_System\_isHRT\_USB\_V1\_1\_HAR T.exe for HART modem and

2PAA101569\_B\_en\_DeviceObjectType\_IFAK\_System\_is\_Pro\_USB\_V1\_1\_DP. exe for PROFIBUS modem.



There could be periodical updates of Device Object Types released. The latest device object types can be found at ABB Solutions Bank.

3. Select the Device Object Types from the list, as shown in Figure 63, and click on **Next** button.

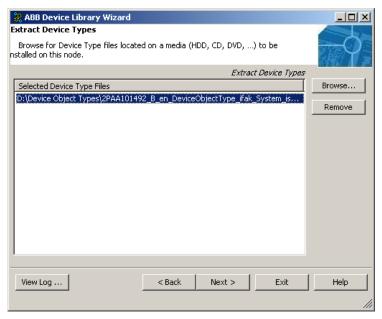


Figure 63. Select Device Object Type from the List

4. In the resulting screen, similar to the one shown in Figure 64, review the Device Object Types to be extracted and click on **Next** button to continue extraction.

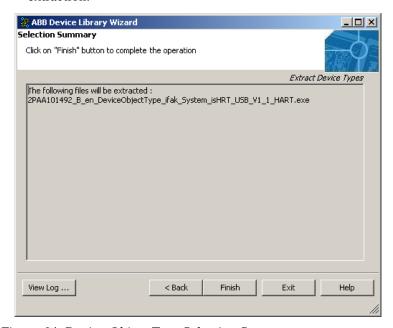


Figure 64. Device Object Type Selection Summary

Once the Device Object Type is extracted, click on the **Main Menu** button to return to the main menu of Device Library Wizard.

## **Restore Device Object Types**

1. In the resulting screen, similar to the one shown in Figure 65, select "Select System" and click on **Next** button.

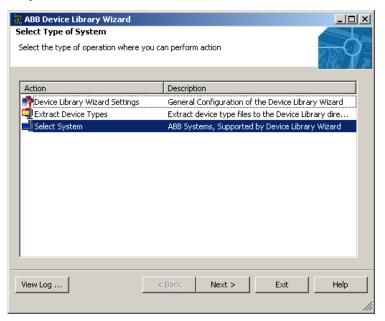


Figure 65. Select System

2. From the list of systems in the resulting screen, as shown in Figure 66, select "Asset Master System" and click on **Next** button.

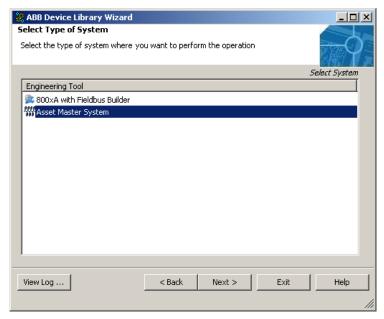


Figure 66. Select Type of System

3. From the list of actions in the resulting screen, as shown in Figure 67, select "Restore Device Types" and click on **Next** button.

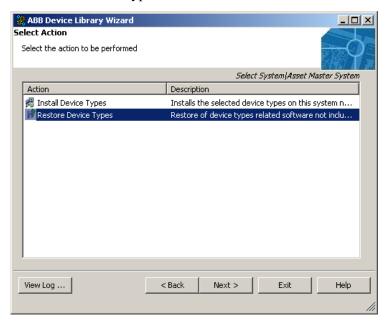


Figure 67. Select Action

4. The resulting screen, similar to the one shown in Figure 68, lists the Fieldbus Protocols. Selec the protocol corresponding to the Device Object Type to be restored and click on **Next** button.

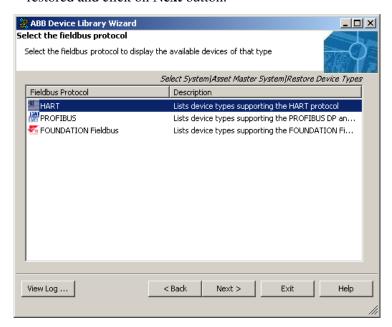


Figure 68. Select Fieldbus Protocol

5. In the resulting screen, similar to the one shown in Figure 69, select from the list of Device Object Types that are to be restored by checking the box against the corresponding device. Click on **Next** button to continue.

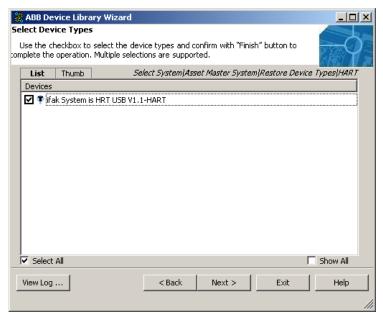


Figure 69. Select Device Object Types

6. The resulting screen, similar to the one shown in Figure 70, displays a summary of the object types being restored. Review the report and then click on **Next** button to continue to restore.

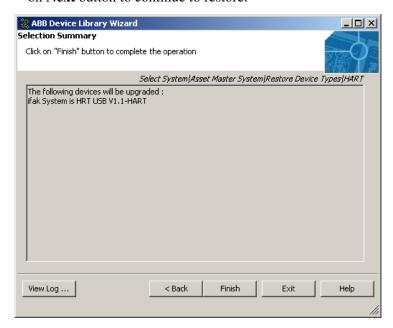


Figure 70. Device Object Types Summary Report

7. The object type restore process invokes the DTM installer during restoration. Follow the instructions on screen to arrive at the screen similar to the one shown in Figure 71.

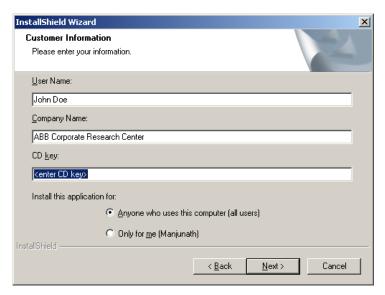


Figure 71. DTM Customer and License Information

Refer to the back of your IFAK CD cover, and enter the Company Name and CD Key exactly as printed. Follow the on screen instructions to continue the DTM Installation to completion.



The installer, at the end of the DTM installation, will prompt for a machine restart. Restart the machine for the DTM to install and register successfully.

8. Once the DTM installation is complete, a screen similar to the one shown in Figure 72 is displayed, with a summary report of the restore process. Errors if any, during the restore process, are displayed in the report.

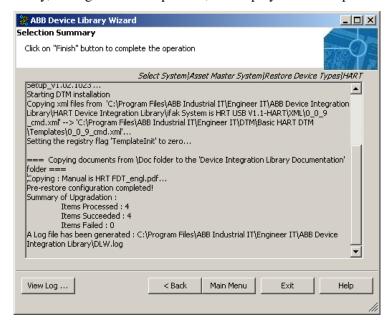


Figure 72. Restore Process Summary Report

Click on the **Exit** button to complete the object type restore process.

## SMS and e-mail Messaging

#### Introduction

The procedure in this section is required to correctly configure SMS and e-mail Messaging in the Service Structure.

## **Configuring the Location**

- 1. Open a Asset Master Workplace.
- 2. Use the Structure Selector to open the Service Structure

3. Use the Object Browser to navigate to:

Services > Messenger Server, Service > Messenger SG\_1,

Service Group > Messenger SP\_1, Service Provider

- 4. Select Service Provider Definition in the Aspect List Area.
- 5. Under the Configuration tab in the Preview Area:
  - a. Select the Asset Master Node: drop-down list box
  - b. Enable the Enabled check box and click **Apply**.
  - c. Verify that the **Current** field (below the Enabled check box) changes from Undefined to Service.

#### **Restarting the Event Collector Service**

The following steps need to be performed to see events in Messenger Event Log:

- 1. Use the Structure Selector to open the **Service Structure**.
- 2. Use the Object Browser to navigate to:

Event Collector, Service > ABB 800xA System Message Server, Service Group > Event Collector\_ABB 800xA System Message Server NodeName, Service Provider

where *NodeName* is the Asset Master node.

- 3. Select Service Provider Definition in the Aspect List Area.
- 4. Disable the Enabled check box and click **Apply**.
- 5. Enable the Enabled check box and click **Apply**.
- 6. This will restart the Event Collector\_ABB System Message *Server\_NodeName* service and the *Messenger Event Log* will display all events.

## **Asset Optimization**

#### Introduction

The Asset Optimization Functional Area includes:

- Asset Optimization.
- PC, Network and Software Monitoring.

After restoring Asset Master System, the following post installation procedures for Asset Optimization are premofmed.

#### **AoWebServerNode**

The following steps are required to correctly set the Asset Master Node.

- 1. Open a Asset Master Workplace.
- 2. Use the Structure Selector to open the Control Structure.
- 3. Use the Object Browser to navigate to:

#### Root, Domain > Asset Optimization, Asset Optimization

- 4. Select Asset Optimization Configuration Properties in the Aspect List Area.
- 5. In the Preview Area, set the **AoWebServerNode** property to the name of the Asset Master node.

#### **Asset Monitoring Service Provider Node**

The following steps are required to correctly set the Asset Monitoring Service Provider Node:

- 1. Open a Asset Master Workplace.
- 2. Use the Structure Selector to open the **Service Structure**.
- 3. Use the Object Browser to navigate to:

Services > Asset Monitoring, Service > AssetMonitoring SG\_1, Service Group > AssetMonitoring SP\_1, Service Provider

4. Select **Service Provider Definition** in the Aspect List Area.

- 5. Set the Asset Optimization Service Provider node to Asset Master Node.
- 6. Enable the **Enabled** check box and click **Apply**. This will set the Service Provider hostname.
- 7. Use the Structure Selector to open the **Control Structure**.
- 8. Use the Object Browser to navigate to:

# Root, Domain > Asset Optimization, Asset Optimization > AO Server 1, AO Server 1

- 9. Select **Asset Optimization Server** in the Aspect List Area.
- 10. Verify that **Service Status** is Service, and that the Asset Monitoring Engine is running.

#### Restarting the Event Collector Service

The following steps need to be performed to see events in Asset Optimization Event Log:

- 1. Use the Structure Selector to open the **Service Structure**.
- 2. Use the Object Browser to navigate to:

Event Collector, Service > ABB 800xA System Message Server, Service Group > Event Collector\_ABB 800xA System Message Server\_NodeName, Service Provider where *NodeName* is Asset Master Node.

- 3. Select Service Provider Definition in the Aspect List Area.
- 4. Disable the **Enabled** check box and click **Apply**.
- 5. Enable the Enabled check box and click Apply.
- 6. This will restart the Event Collector\_ABB System Message *Server\_NodeName* service and the Asset Optimization Event Log will display all events.

#### **Web-Enabled Views on Non-Industrial IT Systems**

The software requirements on non-Industrial IT systems required to support webenabled Asset Optimization views are:

• Internet Explorer 6 or later.

MS XML 3.0 with Service Pack 2 or later.

The maximum security settings on non-Industrial IT systems required to support web-enabled Asset Optimization views are:

- Set Local Intranet security to High.
- Select Custom Level and set the following:
  - Download signed ActiveX® controls: Prompt.
  - Run ActiveX controls and plug-ins: Enable.
  - Script ActiveX controls marked for safe scripting: Enable.
  - Active scripting: Enable.
- Accessing the Asset Optimization thin client interface always requires user authentication for Asset Optimization web pages.
- To access Maximo portal views, set Microsoft VM to High Safety and Scripting of Java<sup>TM</sup> applets to Enable.
- Maximo Portal views are web access into the Maximo system. They work best with versions of the Java Virtual machine at least as new as J2SE 1.4.2 (Java 2 SDK and Java 2 Runtime Environment).

# **SAP/PM Integration**

The Asset Optimization integration with the SAP/PM module requires that the SAP administrator install ABAP code on the SAP/PM production server where the PM module is installed.

- 1. Navigate to the directory where Asset Optimization software is installed.
- 2. Use Windows Explorer to locate the following directory: ...\Asset Optimization\SAPConnectivity\SAP-ABAP
- 3. This directory contains the source for ABB's ABAP integration code and documentation that describes the ABAP code integration.

The ABB ABAP integration code source files are:

- Z\_ABB\_EQUIPMENT\_DETAIL.ABAP.doc
- Z\_ABB\_MS\_LIST.ABAP.doc

- Z\_ABB\_NOTIFICATION\_CREATE.ABAP.doc
- Z\_ABB\_NOTIFICATION\_LIST.ABAP.doc
- Z\_ABB\_OBJECTSTATUS\_LIST.ABAP.doc
- Z ABB WORKORDER LIST.ABAP.doc
- Z\_ABB\_WORKORDER\_HIST1.ABAP.DOC

Reference documents include the following:

- SAP RTAO Development.doc
- Z ABB PM FunctionGroup-Modules.doc

Refer to the SAP/PM Basis and ABAP integration personnel for details involving the addition of ABAP-enabled interfaces in SAP.

# **DMS Calibration Integration**

This topic covers the post installation tasks required when using DMS Calibration Integration.

### **DMS Software Users Configuration**

Asset Master users must also be configured in the DMS software. Configure all Asset Master users in the DMS software who require access to DMS information, including the Asset Master Service User. Refer to the Meriam Process Technologies User Guide Device Management System instruction for information on configuring users.



If using the non-21 CFR Part 11 version of the DMS software, a prompt will appear asking that a password be entered, even for domain users. This is due to creating a DMS account to use if logging into the DMS client without using Windows Integrated Security. This password does not need to match the Windows password and must be between four and ten characters.

## **DMS Server Configuration on non-Asset Master Node**

If the DMS Server is installed on a non-Asset Master node, additional Asset Optimization software components are required.

- 1. From the DMS Server node, navigate to the Asset Viewer web page at: http://<Asset Master>/abbao.
- 2. If prompted to accept the Asset Viewer ActiveX component, accept it. This component is required for connection to the DMS Server.

#### **Changing the DMS Server Location**

The DMS Server location is defined by the DMS Server URL configured in the DMS client. In the rare case where a DMS Server must be moved, the location must be changed for all DMS clients on all nodes, and the Asset Master must be rebooted. Refer to the Meriam Process Technologies User Guide Device Management System instruction for information on changing the URL. In addition, the location must be changed in each of the Division aspect that refer to that DMS server.

# **Internet Explorer Configuration**

- Use standard Windows procedures to access the Local Area Network (LAN) Settings dialog.
- 2. If proxy configuration is enabled, enable the Automatically detect settings check box.

#### **Excel Initialization**

The following procedure is necessary if using the XY Profile Deviation Asset Monitor.



Failure to perform the required Microsoft Excel user setup when using the XY Profile Deviation Asset Monitor may cause the AO Server startup to fail.

- 1. Use the Asset Master Service User account to open Microsoft Excel at least once.
- 2. Perform the required user setup (first time execution installation user initials).

# PC, Network and Software Monitoring

#### Introduction

This section describes the actions necessary to set up the Basic Computer Monitoring functionality of PC, Network and Software Monitoring.

# **Basic Computer Monitoring**

To set up the OPC Data Source Definition aspect:

- 1. Use the Structure Selector to open the **Control Structure**.
- 2. Use the Object Browser to navigate to and select **IT OPC Server Network** in the Aspect Object Area.
- 3. Right-click on OPC Data Source Definition in the Aspect List Area and select **Config View** from the context menu that appears.
- 4. Click **New** in the Preview Area.
- 5. Click **Add** and select the appropriate service provider from the list.
- 6. Click **OK** twice.
- 7. Click **Apply**.

In order to create and configure the Basic Computer Monitoring functionality the Basic Computer Monitoring Configuration Tool must be run.

1. Select:

Start > All Programs > ABB Industrial IT 800xA > Asset Optimization > PC, Network and Software Monitoring > Basic Computer Monitoring Configuration Tool to launch the Basic Computer Monitoring Configuration Tool.

2. Click **Start**. The application will automatically close when it is completed.

Normally only minor configuration changes are required after the software is installed and the Basic Computer Monitoring Configuration Tool is run. The default alarm limits are expected to be suitable in most situations. In some cases it may be necessary to modify the hard drives that require monitoring. Changing the alarm

limits and the hard drives being monitored is done in the Basic Computer Device aspect shown in Figure 73.

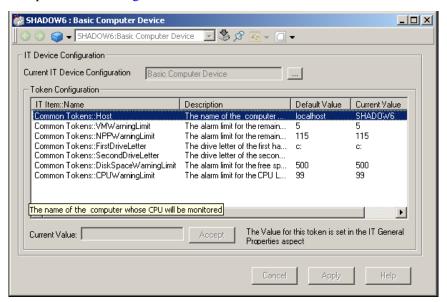


Figure 73. Basic Computer Device Aspect

# **Device Library Wizard**

#### Introduction

This section describes post installation procedures for the Device Library Wizard.

# **Device Library Wizard Server Settings**

Perform the following procedure on all Asset Master.

1. Open the Device Library Wizard:

Start > All Programs > ABB Industrial IT 800xA > Device Mgmt > ABB Device Library Wizard

- OR -

double-click the ABB Device Library Wizard shortcut on the Desktop.

- 2. When the Device Library Wizard main window opens, select Device Library Wizard Settings and click **Next**.
- 3. Select Server Setting and click **Next**.
- 4. Enter for the system node name or IP address of Asset Master. Click **Next** when complete.
- Successful connection is indicated by the Configuring server settings is completed! entry in the logger area of the Finish Operation dialog. Click **Next** and follow the wizard to complete and exit from the configuration process. Close the Device Library Wizard by clicking **Exit**.
- i
- It is only possible to work with Device Types using the Device Library Wizard after successfully completing the server node settings configuration.
- i
- The Device Library Wizard generates a log file. To view the contents of the log file click **View Log** in the Device Library Wizard dialog.

The path to the log file is:

<Installation path>\ABB Industrial IT\Engineer IT\ABB Device
Integration Library\DLW.log

# **Device Type Preparation (Optional)**

Perform the following steps at the point of time the Device Types to be used in the Asset Master are known.

- 1. Open the Device Library Wizard from the Windows start menu or double-click the ABB Device Library Wizard shortcut on the Desktop.
- 2. When the Device Library Wizard opens select Extract Device Types and click **Next**.
- 3. Click **Browse** and navigate to the corresponding folder that contains the specific Device Type files.



Device Type files are zip files (.zip) or self extracting zip files (.exe).

Select the Device Type files available on local disk and/or local network and extract them. It is not mandatory to copy all the Device Type files to the local disk before extracting them.



Asset Master Installation DVD2 contains a range of Device Type files released for the Asset Master. All released Device Types can also be downloaded from ABB Solutions Bank at:

#### http://solutionsbank.abb.com/sbhome/

- 4. Select the Device Type files (multiple selection is possible) and click **Open**.
- 5. Click **Next** and then **Finish** to start the extracting operation.
- 6. Repeat Step 3 to Step 5 as required for all required Device Type files.
- 7. Click **Exit** to close the Device Library Wizard.
- i

It is recommended to read the corresponding release notes to the Device Types.

# **Appendix A Terminology**

It is recommended that you familiarise yourself with the following list of terms:

Table 6.

Term	Description		
ActiveX <sup>®</sup>	Microsoft <sup>®</sup> standard for user interface components, based on definition of software interfaces.		
AO	Asset Optimization.		
Asset Master Workplace	Provides a user interface for maintenance personnel to support their daily workflow most efficiently.		
Asset Monitor	Application responsible for retrieving data from, and interacting with, multiple data servers, OLE for Process Control ® (OPC®) servers, etc.). It analyzes the data and when necessary, issues an Asset Condition Document and notifies the user of the detected condition.		
Aspect Object	A computer representation of real objects such as pumps and valves or a number of virtual objects such as service or object type. An Aspect Object is described by its aspects and organised in structures.		
Distributed COM (DCOM)	Remote Procedure Calls to enable distributed component objects to communicate with each other.		
DMS	Device Management System (DMS) database software. Provides calibration and configuration management through the companion DHH810-MFT Series Calibrator/HART Communicator, and DHH800-MFC HART Communicator.		

Table 6.

Term	Description		
Fieldbus Builder (FBB)	ABB aspect system for fieldbus and DTM management, implementing a Frame Application according to specification FDT 1.2		
Fieldbus Builder FF (FBB FF)	The system extension that owns and stores all FOUNDATION Fieldbus relevant data and the business logic belonging to it. The FBB FF exposes its objects through an automation interface.		
FOUNDATION Fieldbus (FF)	Bi-directional communications protocol used for communications among field instrumentation and control systems.		
Industrial <sup>IT</sup>	Industrial IT is ABB's solution for business processes. It allows seamless integration of systems for plant automation, plant optimisation and common business processes at run time.		
Node	A computer communicating on a network e.g. the Internet, Plant, Control or I/O network. Each node typically has a unique node address with a format depending on the network it is connected to.		
PC	Personal Computer. Computer running the Windows operating system.		
Security	Security controls a user's authority to perform different operations on Aspect Objects, depending on several parameters:		
	<ul> <li>The user's credentials, as provided by Windows</li> <li>The node where the user is logged in. This makes it</li> </ul>		
	possible to give a user different authority depending on where he/she is located, e.g. close to the process equipment, in a control room, or at home accessing the system through Internet.		
	The object the user wants to perform the operation on.		

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Table 6.

Term	Description	
Server	A node that runs one or several Services.	
Structure	A hierarchical tree organization of Aspect Objects that describes the dependencies between the real objects. An Aspect Object can exist in multiple structures, for example both in a Functional Structure and in a Location Structure.	
View	Aspects can be presented in a number of ways depending on the task performed e.g. viewing or configuration. Each presentation form is called a view.	

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